

REMARKS

Claim 134 has been rewritten in independent form as new claim 146. Applicants appreciate the Patent Office's indication that former claim 134 would be allowable if re-written in independent form. This has been done in the form of new claim 146, thus claim 146 is believed to be allowable.

Independent claim 126 has been amended to recite that the semiconductor nanoscale wire is free-standing. Support for this amendment can be found in the specification, for instance, on page 8, lines 3-9.

Independent claim 140 has been amended to recite that the semiconductor nanoscale wire has an approximately circular cross-section. Support for this amendment can be found in the specification, for example, in Fig. 1, or on page 7, lines 23-30.

Claim 143 has been amended to recite "further comprising."

No new matter has been added. Claims 126-134 and 137-146 are now pending for examination.

Claim Objections

Claim 143 has been objected to because the claim omits a transition word.

Applicants have amended claim 143 as suggested by the Examiner. Thus, it is respectfully requested that the objection be withdrawn.

Rejections under 35 U.S.C. §102(b) in view of Hu

Claims 126-133 have been rejected under 35 U.S.C. §102(b) as being anticipated by Hu, *et al.*, U.S. Pat. No. 6,413,802 ("Hu").

It is not seen where Hu discloses or suggests a semiconductor nanoscale wire that is free-standing, as is recited in independent claim 126, or having an approximately circular cross-section, as is recited in independent claim 140. The fins in Hu are rectangular slabs of material, created through various semiconductor deposition processes onto the surface of a semiconductor substrate. There is no disclosure or suggestion in Hu of wires that are not free-standing as defined in the instant specification (e.g., which at some point may not be attached to another article, can be in solution, etc.) and there is no disclosure or suggestion in Hu of creating other shapes, such as

semiconductor nanoscale wires having approximately circular cross-sections, nor is it seen how Hu could be modified to create other shapes.

Accordingly, it is believed that independent claims 126 and 140, as amended, are not anticipated by Hu, and it is respectfully requested that the rejection of these claims be withdrawn. The remaining claims rejected on this ground each depend from, directly or indirectly, from claims 126 or 140, and should be allowable for at least the same reasons. Withdrawal of the rejection of these claims is also respectfully requested.

Rejections under 35 U.S.C. §102(e) in view of Hu and Deng

Claim 138 has been rejected under 35 U.S.C. §102(e) as being anticipated by Hu, as evidence by Deng, *et al.*, “Salicidation process using NiSi and its device application,” *J. Appl Phys.*, 81(12):8047, 1997 (“Deng”).

Claim 138 depends from claim 126. For at least the reasons explained above with respect to claim 126, it is believed that Hu does not anticipate amended claim 126. Accordingly, although it is not conceded that the teachings of Deng evidence that Hu anticipates claim 138, it is believed that claim 126 is not anticipated by Hu. Thus, claim 138 also cannot be anticipated by Hu, and it is therefore respectfully requested that the rejection of claim 138 be withdrawn.

Rejections under 35 U.S.C. §103(a) in view of Hu and Deng

Claim 128, 129, and 144 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Hu in view of Deng.

Claims 128, 129, and 144 each depend, either directly or indirectly, from independent claims 126 and 140. For at least the reasons explained above with respect to the rejection under §102(b) in view of Hu alone, the premise of the rejection of independent claims 126 and 140 (that Hu teaches all of the limitations of claims 126 and 140, as amended) is believed to be incorrect. Accordingly, while Applicants do not concede that there would have been any suggestion or motivation to combine Hu and Deng in the manner suggested in the Office Action, the present rejection cannot stand, regardless. Thus, withdrawal of the rejection of claims 128, 129, and 144 is respectfully requested.

Rejections under 35 U.S.C. §103(a) in view of Hu and Wu

Claim 139 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Hu as evidenced by Wu, *et al.*, “Single-crystal metallic nanowires and metal/semiconductor nanowire heterostructures,” *Nature*, 430:61-65, 2004 (“Wu”).

Claim 139 depends from independent claim 126. As previously discussed, it is believed that Hu does not anticipate independent claim 126. Thus, while it is not conceded that there would have been any suggestion or motivation to combine Hu with Wu as was suggested in the Office Action, this rejection cannot stand, regardless. Accordingly, it is respectfully requested that the rejection of claim 139 be withdrawn.

CONCLUSION

In view of the foregoing, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this response, that the application is not in condition for allowance, the Examiner is requested to call the undersigned at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge our Deposit Account No. 23/2825, under Order No. H0498.70217US02 from which the undersigned is authorized to draw.

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Respectfully submitted,

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